Amendments to the Claims

Please cancel Claims 24-31 and 33. Please amend Claims 32 and 35. Please add new Claims 36-53. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-31. Canceled.

32. (Currently amended) A method for selecting one or more vaccine compositions from among a group consisting of two or more distinct vaccine compositions for assessment in a human, said vaccine compositions each comprising one or more nucleic acid molecules encoding one or more antigens which comprise the same $CD8^+$ T cell epitope, said method comprising the steps of:

(a) contacting human antigen presenting cells in culture with a vaccine composition selected from among said group of vaccine compositions, thereby, if one or more of the nucleic acid molecules encoding one or more antigens which comprise said T cell epitope are taken up and processed by said antigen presenting cells, producing one or more processed antigens;

(b) contacting said antigen presenting cells of step (a) with monoclonal human T cells wherein the monoclonal human T cells are $CD8^+$ T cells under conditions sufficient for said T cells to respond to one or more of the processed antigens;

(c) determining the level of said T cells' response to one or more of the processed antigens;

(d) repeating steps (a), (b) and (c) with each additional vaccine composition in the group; and

(e) selecting at least one vaccine composition that exceeds a predetermined level of said T cells' response for assessment in one or more human subjects.

33. Canceled.

34. (Previously presented) The method of Claim 32 wherein the human antigen presenting cells are autologous cells with the monoclonal T cells.

35. (Currently amended) A method for optimizing the T cell response against a T cell epitope comprising the steps of:

(a) separately contacting human antigen presenting cells in culture with each of two or more distinct vaccine compositions ~~each having~~, wherein each of the distinct vaccine compositions comprises one or more nucleic acid molecules encoding one or more antigens which comprise the same specific T cell epitope, under conditions suitable for said human antigen presenting cells to take up nucleic acid molecules and permit the human antigen presenting cells to produce one or more processed antigens;

(b) contacting the antigen presenting cells produced by step (a) with monoclonal human T cells having a T cell receptor specific for said specific T cell epitope and known HLA allele for said T cells under conditions sufficient for said T cells to respond to the processed antigen;

(c) determining the T cell response to the processed antigen, whereby the vaccine composition possessing an optimal response is selected; and

(d) assessing the vaccine composition isolated in step (c) in one or more human subjects.

36. (New) The method of Claim 35 wherein the monoclonal human T cells are $CD4^+$ T cells and the T cell epitope is a CD4 epitope.

37. (New) The method of Claim 35 wherein the monoclonal human T cells are $CD8^+$ T cells and the T cell epitope is a CD8 epitope.

38. (New) The method of Claim 35 wherein the human antigen presenting cells are selected from the group consisting of macrophages, dendritic cells and B cells.

39. (New) The method of Claim 35 wherein the T cell response to the processed antigen is indicated by the level of release of one or more cytokines or level of lysis of the antigen presenting cells.

40. (New) The method of Claim 35 wherein the T cell response to the processed antigen is indicated by the level of release of one or more cytokines or the level of stimulated formulation of antibodies by B cells.

41. (New) The method of Claim 35 wherein steps (a) and (b) are conducted simultaneously.

42. (New) The method of Claim 35 wherein the vaccine compositions further comprise an immunostimulating complex.

43. (New) The method of Claim 35 wherein the human antigen presenting cells are autologous cells with the monoclonal T cells.

44. (New) The method of Claim 32 wherein the human antigen presenting cells are selected from the group consisting of macrophages, dendritic cells and B cells.

45. (New) The method of Claim 32 wherein the level of T cells' response to the processed antigen is indicated by the level of release of one or more cytokines or level of lysis of the antigen presenting cells.

46. (New) The method of Claim 32 wherein steps (a) and (b) are conducted simultaneously.

47. (New) The method of Claim 32 wherein the one or more vaccine compositions further comprise an immunostimulating complex.

48. (New) A method for selecting one or more vaccine compositions from among a group consisting of two or more distinct vaccine compositions for assessment in a human, said

vaccine compositions each comprising one or more nucleic acid molecules encoding one or more antigens which comprise the same $CD4^+$ T cell epitope, said method comprising the steps of:

(a) contacting human antigen presenting cells in culture with a vaccine composition selected from among said group of vaccine compositions, thereby, if one or more of the nucleic acid molecules encoding one or more antigens which comprise said T cell epitope are taken up and processed by said antigen presenting cells, producing one or more processed antigens;

(b) contacting said antigen presenting cells of step (a) with monoclonal human T cells wherein the monoclonal human T cells are $CD4^+$ T cells under conditions sufficient for said T cells to respond to one or more of the processed antigens;

(c) determining the level of said T cells' response to one or more of the processed antigens;

(d) repeating steps (a), (b) and (c) with each additional vaccine composition in the group; and

(e) selecting at least one vaccine composition that exceeds a predetermined level of said T cells' response for assessment in one or more human subjects.

49. (New) The method of Claim 48 wherein the human antigen presenting cells are autologous cells with the monoclonal T cells.

50. (New) The method of Claim 48 wherein the human antigen presenting cells are selected from the group consisting of macrophages, dendritic cells and B cells.

51. (New) The method of Claim 48 wherein the level of T cells' response to the processed antigen is indicated by the level of release of one or more cytokines or the level of stimulated formulation of antibodies by B cells.

52. (New) The method of Claim 48 wherein steps (a) and (b) are conducted simultaneously.

53. (New) The method of Claim 48 wherein the one or more vaccine compositions further comprise an immunostimulating complex.